

HEATING ELEMENT

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Abstract of JP61044794

PURPOSE: To provide a cylindrical heating element having 3 or more supporting parts on the circumference, resistant to deformation, and suitable for a semiconductor single crystal preparation apparatus, etc.

CONSTITUTION: A high-purity graphite is compression molded to obtain a heating element 1 having (i) plural notches 2 over the whole circumference for the control of electrical resistance, (ii) a pair of supporting parts 3a and 3b used also as the electrodes and formed to the positions dividing the whole circumference in equal parts, and (iii) the supporting parts 4a and 4b forming equal distances from the above supporting parts 3a, 3b. The heating element 1 is attached to the silicon single crystal preparation apparatus by the supporting parts 3a, 3b, 4a and 4b, and is heated by passing DC electrical current through the supporting parts 3a and 3b. Since the heating element 1 is supported by four stems, own weight of the heating element and the thermal stress generated by heating are distributed over the stems, and the deformation of the element during use can be prevented.

